DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004981 Address: 333 Burma Road **Date Inspected:** 14-Dec-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Sun Wei **CWI Present:** Yes No Yes **Inspected CWI report:** N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower

Summary of Items Observed:

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

North Shaft, Skin E, Lift 1

The Quality Assurance Inspector observed ZPMC performing in process welding of the partial joint penetration weld joining the longitudinal stiffeners to skin plate on the semi automated flux cored arc welding gantry system. The skin plate has numerous jacks on the part in an effort to minimize distortion from the welding. ZPMC Quality Control was present monitoring the welding in accordance with WPS-B-T-2332-Tc-P5-F.

East Shaft, Lift 1

The Quality Assurance Inspector was informed ZPMC was continuing to weld the fit-lug to diaphragm fillet weld connections. 17 welders were present in the confined space. ZPMC was utilizing the flux cored arc welding process to produce the fillet welds in the vertical position

South Shaft, Skin D, Lift 2

The Quality Assurance Inspector observed ZPMC performing fit-up and tack welding operations of the partial joint penetration welds joining the bracing connection plates to the longitudinal stiffeners. The welders were utilizing the shielded metal arc process to produce the tack welds.

South Shaft, Skin A, Lift 2

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

The Quality Assurance Inspector observed ZPMC in the process of performing fit-up and tack welding operations of the 74M Diaphragm plate to skin A. ZPMC was utilizing the flux cored arc welding process to produce the tack welds.

North Shaft, Skin C, Lift 1

The Quality Assurance Inspector observed ZPMC in the process of performing fit-up and tack welding operations of the longitudinal stiffeners to skin plate partial and complete joint penetration welds. The welders were utilizing the shielded metal arc welding process to produce the tack welds in the horizontal position.

Summary of Conversations:

As stated in the contents of the above report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Josh Ishibashi 1.376.647.10411, who represents the Office of Structural Materials for your project.

Inspected By:	Bertlesman, Greg	Quality Assurance Inspector
Reviewed By:	Wright,Mark	QA Reviewer